

# A New Variety of *Ficus semicordata* (Moraceae) from Nepal

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**ABSTRACT.** *Ficus semicordata* Buchanan-Hamilton ex J. E. Smith is known as a Khanyu tree in Nepal, and is locally used as a forage tree. Nepalese farmers distinguish two kinds of Khanyu based on the fodder quality: khasro and rai. Farmers tend to prefer rai khanyu because they believe that livestock fed with rai khanyu give higher milk yields, whereas khasro khanyu has an adverse effect on milk production and tends to reduce it. It was only in the late 1980s that researchers distinguished two types of Khanyu. It appears that both kinds of Khanyu were included in the studies made by earlier taxonomists and others using the general scientific name of *F. semicordata*, as these workers do not mention the different local names of this species. Detailed taxonomic and ecological studies revealed that in Nepal two varieties of khanyu occur in Nepal: the typical variety and var. *montana*, described herein.

*Ficus semicordata* Buchanan-Hamilton ex J. E. Smith is one of thirty-five species of *Ficus* or fig tree occurring in the kingdom of Nepal (Hara et al., 1982: 209–211). It is a common tree belonging to the family Moraceae. In the Nepali language it is known as a Khanyu tree, meaning fruits edible. The species has a natural distribution throughout Nepal, from the Terai (elevation 200 m) to the Mid-Hills (elevation 2000 m). It is gregarious in nature and particularly common on the sides of ravines, along water courses, and in forests.

*Ficus semicordata* is a light-demanding species, but seedlings and saplings can withstand a little shade. Flowering and fruiting take place chiefly from May to September (Brandis, 1906: 606; Polunin & Stainton, 1984: 370) but can occur sporadically throughout the year. The leaves are an excellent source of fodder for cattle and goats, and it is one of the most important fodder species in Nepal.

This species was first collected in Nepal in 1802 by Buchanan-Hamilton, who suggested the name *Ficus semicordata* on account of the pronounced unequal heart-shaped base of the leaf.

Nepalese people informally distinguish two varieties of Khanyu: khasro and rai khanyu (Amatya,

1989). Scientific examination of the species at Oxford University, U.K., also suggested that two taxonomic varieties of Khanyu tree occur in Nepal. The principal distinctions between these two varieties are as follows.

***Ficus semicordata* Buchanan-Hamilton ex J. E. Smith var. *semicordata***

Small to medium-sized (10–12 m) tree, with dark gray bark; the young shoots roughish pubescent; leaves elliptical-lanceolate, average length 21 cm, average breadth 7.7 cm; leaf margin serrate (tooth size variable); upper surface scabrous; hairs on the mid-vein and lateral veins tomentose, lower lamina villous. Lamina pinnately nerved, with 6 basal and 9–14 pairs of lateral veins; tertiary venation semi-craspedodromous; average petiole length 1.1 cm. Receptacles (figs), fleshy, 1.5–2.5 cm diam.; peduncles 0.3–1.5 cm long, collar or basal bracts 3(–4), at the end of the peduncle, pubescent. Flowers minute, of four types, unisexual, on the inner walls of the receptacle. Latex creamy white. Mid-ribs of the fresh leaves creamy white. Vernacular name: khasro khanyu.

In Nepal this variety occurs from 200 to 2000 m altitude. The distribution extends to Central India, Himalayas, Myanmar (Burma), Thailand, southern China, Indo-China, and Malaysia (Corner, 1960).

This is the typical form of the species. The type specimen is kept in the Smith Herbarium at the Linnean Society of London (LINN). It was first named by Corner (1960), when he distinguished it from *Ficus semicordata* var. *conglomerata*.

There are various collections of *Ficus semicordata* in the herbaria of K, OXF, CGE, BM, and CAL. Most taxonomists, in their collections, have identified *Ficus semicordata* as *Ficus cunia* Buchanan-Hamilton ex Roxburgh; some have used the name *Ficus conglomerata* Roxburgh as well. Corner's (1960) monographic studies on the genus *Ficus* have greatly clarified the taxonomy and nomenclature.

***Ficus semicordata* var. *montana* Amatya, var. nov.** TYPE: Nepal. Terai: 1806, *F. Buchanan s.n.* (holotype, LINN).



Arbor latice cremieo-albo vel roseo; folia elliptico-lanceolata; superficies laevis, pagina inferior pilis strigosis in costa et nervis lateralibus vestita; costa foliorum recentium rosea. Lamina pinnatinervis septem jugis nervorum basalium, 10–21 jugis nervorum lateralium; venatio tertiaria brochidodroma. Flores tetramorphi, plerumque unisexuales. Nomen vernaculum rai khanyu.

A small to medium-sized (10–12 m) tree with dark bark; the young shoots roughish pubescent; leaves elliptical-lanceolate, average length 25 cm, average breadth 10 cm; leaf margin serrulate or entire; upper surface smooth; hairs on mid-veins and lateral nerves strigose, appressed. Lamina pinnately nerved, with 7 basal and 10–21 pairs of lateral veins; tertiary venation brochidodromous; average petiole length 1.4 cm. Receptacles (figs) fleshy, 1.0–1.5 cm diam., peduncles 0.4–1.1 cm long; collar or basal bracts 3, rarely 4, at the end of peduncle, glabrous. Flowers minute, of four types, normally unisexual, occurring on the inner walls of the receptacle. Latex creamy white to pink.

Mid-ribs of fresh leaves pink. Vernacular name: rai khanyu.

In Nepal this variety has a narrower range at relatively high elevations (1400–2000 m). It may occur at these altitudes in neighboring countries (Bhutan, Myanmar, and India).

#### Literature Cited

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